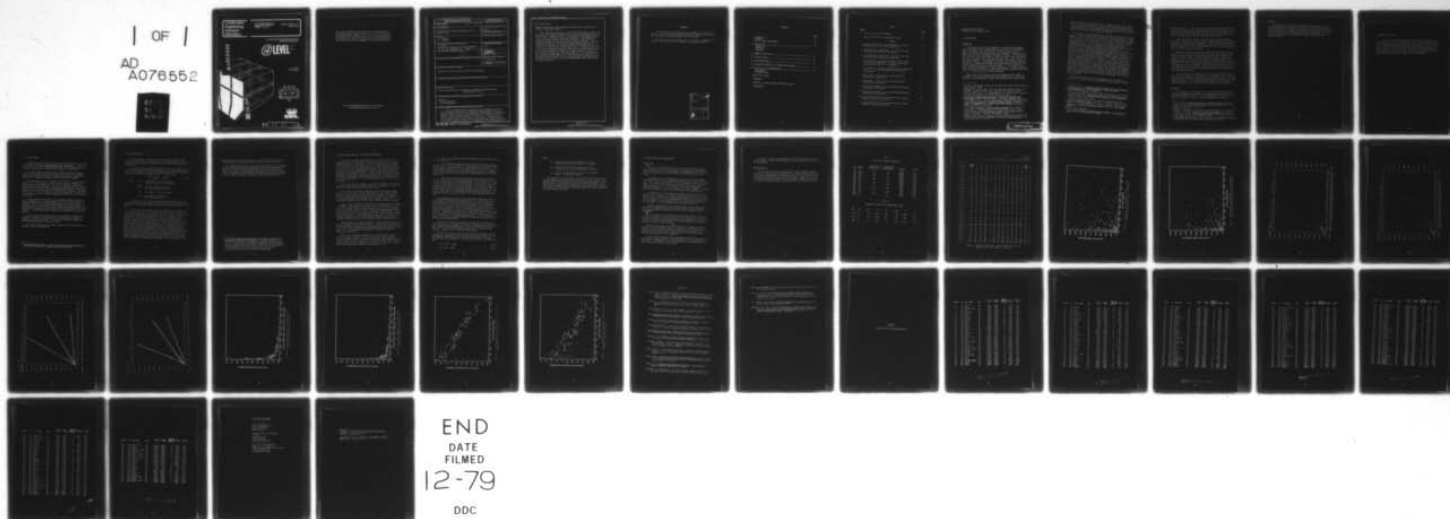


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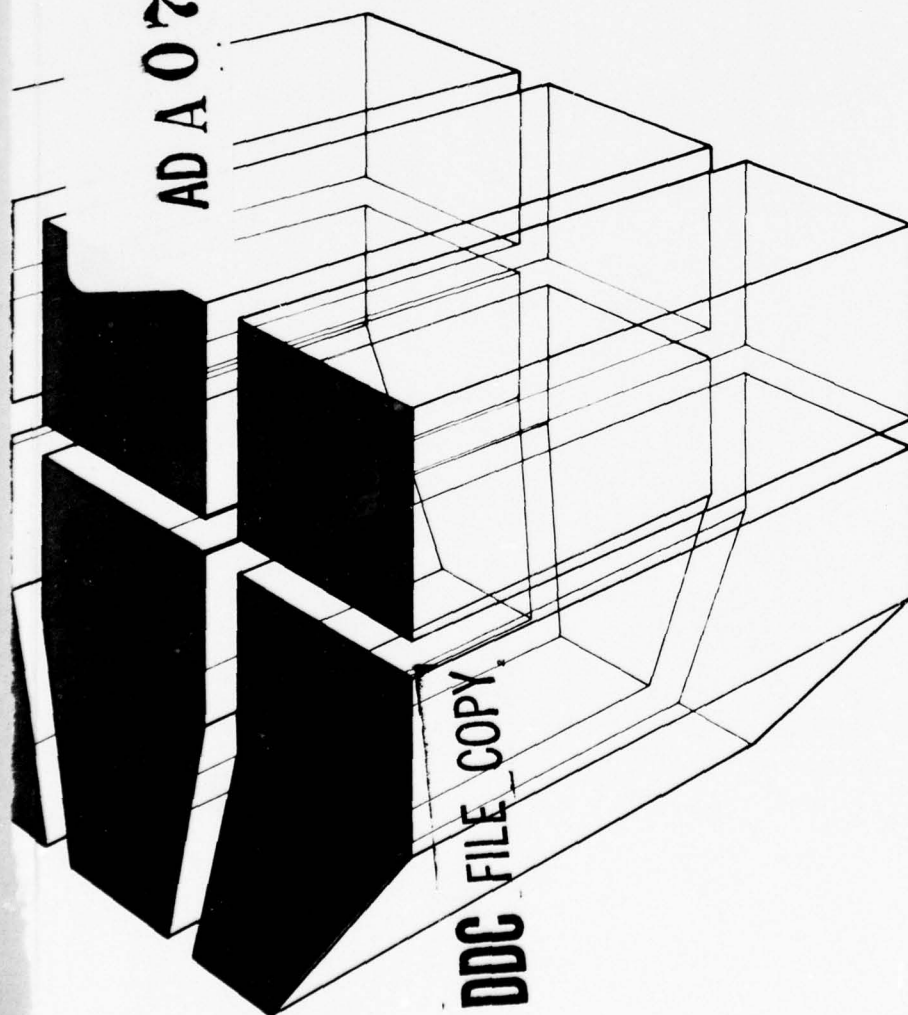
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SPECIAL REPORT N-79  
October 1979

AN ANALYSIS OF MILITARY MIGRATION  
IN THE UNITED STATES

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by  
D. G. Becker  
R. D. Webster

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  Current interpretations of the National Environmental Policy Act have increased the Department of Defense's (DOD) interest in socio-economic impact analysis. The significance of DOD-induced socioeconomic impacts in areas surrounding DOD installations is directly related to the magnitude of population change in those areas. Estimating population change from the amount of migration resulting from DOD activities is not easily addressed; therefore, a knowledge of military migration is		



Block 20 continued.

needed to accurately project population change and to identify subsequent socioeconomic impacts.

This study used census data for the period 1965 through 1970 to describe the relationships between civilian and military migration in the United States. Migration statistics from more than 100 Army installations and 564 surrounding counties were analyzed. Scattergrams and simple correlation analysis were used to detect a significant relationship between civilian and military migration patterns. The data suggest that there is a relationship between them but that the relationship is dependent on the size of the military labor force in relation to the size of the civilian labor force. In addition, the size of the military-dependent population and the size of the direct-hire civilian labor force may influence the civilian migration patterns of local military communities. While the number of civilian migrants can be estimated from the number of military migrants into and out of an area between 1965 through 1970, no accurate population projections can be made, since the trend in military growth between 1965 and 1970 has since been reversed.

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## FOREWORD

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Dr. R. K. Jain is Chief of EN. COL L. J. Circeo is Commander and Director of CERL, and Dr. L. R. Shaffer is Technical Director.

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# AN ANALYSIS OF MILITARY MIGRATION IN THE UNITED STATES

## 1 INTRODUCTION

### Background

The current interest of DOD agencies in analyzing socioeconomic impact originates from interpretations of the National Environmental Policy Act (NEPA)<sup>1</sup> and, specifically, from two court decisions<sup>2,3</sup> which have established the importance of socioeconomic impact as an integral part of the environmental assessment procedure. In predicting<sup>4</sup> and establishing the significance of impacts,<sup>5</sup> many of the same parameters are used, regardless of the analysis technique. Three variables are always apparent in socioeconomic analyses: employment, income, and population. Changes in employment and income within affected economic regions can be addressed by using traditional multiplier analyses, and can be developed by using input-output models,<sup>6,7</sup> the location quotient-export base technique<sup>8</sup> or other methodologies. However, the problems of estimating population change from migration caused by DOD activities in a region are not so easily addressed.

While traditional economic studies of employment and income relationships are certainly important, using population as an additional indicator is very desirable. Many of the controversial issues can be

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<sup>1</sup> National Environmental Policy Act of 1969, 83 Stat 852, 42 USC 4321 et seq. (January 1970).

<sup>2</sup> "McDowell vs. Schlesinger," U.S. District Court, Western District of Missouri, Western Division, No. 75-CV-234, W-4 (June 19, 1975).

<sup>3</sup> "Breckinridge, et al., vs. Schlesinger," U.S. District Court, Eastern District of Kentucky, No. 75-100 (October 31, 1975).

<sup>4</sup> The Economic Impact Forecast System -- Descriptor and User Instructions, DA PAM 200-2 (Department of the Army, December 1976).

<sup>5</sup> R. D. Webster and E. Shannon, The Rational Threshold Value (RTV) Technique for the Evaluation of Regional Economic Impacts, Technical Report N-48/ADA058825 (U.S. Army Construction Engineering Research Laboratory [CERL], June 1978).

<sup>6</sup> J. M. Hughes, Forestry in Itasca County's Economy, Misc. Report 95 (University of Minnesota Agricultural Experiment Station, 1970).

<sup>7</sup> Jarvin Emerson, The Interindustry Structure of the Kansas Economy (Kansas Department of Economic Development, 1969).

<sup>8</sup> Andrew M. Isserman, "The Location Quotient Approach to Estimating Regional Economic Impacts," American Institute of Planners Journal, Vol 43 (January 1977), pp 33-41.



directly related to population shifts. Impacts on social attributes,<sup>9</sup> such as age and sex categories (or distribution), family status categories and income classes of the community are directly related to population redistribution, particularly when the DOD installation provides a predominant portion of some population category.

One aspect of population which has received much attention in some areas is the role of fertility and mortality rates in population change. However, within the United States migration is the major factor in population redistribution. According to A. R. Bird, "Each year, from 1948-1971, about 17 to 20 percent of all U.S. residents 1 year old or over changed residence."<sup>10</sup> In response, social science researchers (demographers, sociologists, geographers, and economists) have examined migration extensively by (1) identifying the determinants of migration,<sup>11</sup> e.g., employment/unemployment, population size, income, distance between origin and destination (distance decay), kinds of amenities, type of housing, and demographic characteristics (age, sex, race, etc.); (2) explaining the decision-making process<sup>12</sup> (the decision to move and the decision where to move); and (3) describing the resultant geographic patterns of migration<sup>13, 14</sup> (rural to urban, channeled, return migration, etc.). Their findings substantiate the expected result that migration is related to such economic variables as employment opportunities and personal income, but the strength of the relationships depends on the data used in the analysis, the geographic scale and the time interval under study. This research also suggests noneconomic relationships, e.g., the kinds of amenities available; the presence or absence of special populations, such as college students, the military and inmates in institutions; and geographic limitations, such as distance.

While special populations are suggested as having important relationships to overall migration, relatively little research has been

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- <sup>9</sup> E. Novak, et al., Environmental Impact Computer System Attribute Descriptor Package -- Reference Document, Technical Report E-86/ADAD24303 (CERL, April 1976).
- <sup>10</sup> Alan R. Bird, "Migration and Its Effect on Agriculture and Rural Development Potential," Labor Force, Migration, Earnings, and Growth, National Fertilizer Development Center Bulletin Y-63 (Tennessee Valley Authority, 1973), p 14.
- <sup>11</sup> C. Blanco, "The Determinants of Interstate Population Movement," Journal of Regional Science, Vol 5, No. 1 (Summer, 1963), pp 77-84.
- <sup>12</sup> John A. Jakle, Stanley Brunn, and Curtis C. Roseman, Human Spatial Behavior -- A Social Geography (Wadsworth Pub. Co., Inc., 1976), Chapter 7.
- <sup>13</sup> Jakle et al., Chapter 8.
- <sup>14</sup> Ira S. Lowry, Migration and Metropolitan Growth -- Two Analytical Models (Chandler Publishing Co., 1966).

done in this area.<sup>15</sup> One reason for this has been the lack of "good" migration data that contain geographic details for these groups. In addition, until recently most migration research has dealt only with net migration (immigration minus outmigration) for specific geographic regions, probably because that was the only data available.

Lowry<sup>16</sup> and others<sup>17</sup> have concluded that net migration figures cannot be treated successfully. Instead, migration must be analyzed in two groups: immigrants and outmigrants. Each of these groups is driven by significantly different socioeconomic forces; e.g., the creation of jobs in a community seems to attract migrants, while a loss of jobs does not necessarily induce outmigration.

Other than studies of actual cases and questionnaires, only one source of data for the United States reflected migrant flows.<sup>18</sup> While these data were helpful to many researchers, the level of geographic detail was still too great (the data were for State Economic Areas [SEAs]). In 1977, the Bureau of the Census published a report<sup>19</sup> which showed both net migration by county and gross immigration and gross outmigration. The data are further divided into age, sex, race, and civilian noncollege status categories. To date, this is the best source of available data to reflect actual numbers of migrants at the county level and, important to this study, is the only source of usable data reflecting military migrations.

Current observations indicate that military migration patterns do not follow the norm at a national or even at a regional scale; however, some regularity should be discernible at the community level. Military migrations occur for other than economic reasons and are usually called forced migrations. If a pattern of forced migration exists, models of migration behavior must be constructed to predict future patterns.

### Objective

The objective of this report is to describe and explain the relationship between DOD activities and the migration patterns of local communities between 1965 and 1970; this knowledge will help isolate the impacts of population change on other socioeconomic attributes.

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<sup>15</sup> John F. Long, Interstate Migration of the Armed Forces, paper presented at the annual meeting of the Southern Sociological Society, Miami, Florida (April 7-10, 1976).

<sup>16</sup> Lowry, pp 94-95.

<sup>17</sup> Michael J. Greenwood, "Research on Internal Migration in the United States: A Survey," Journal of Economic Literature, Vol 13 (1975).

<sup>18</sup> U.S. Bureau of the Census, Migration Between State Economic Areas, 1970 Census Subject Report PC(2)-2E (1972).

<sup>19</sup> Gross Migration by County -- 1965 to 1970; Current Population Report, Series P-25, No. 701 (U.S. Bureau of the Census, 1977).

### Approach

Three distinct tasks were accomplished for this study: (1) military migration statistics were isolated for communities that have military populations or are under the influence of a military installation; (2) the existence of a significant relationship between military migration and other (mainly civilian) migration was ascertained; and (3) a model for predicting civilian migration given military presence in an area was created.

## 2 COMMUNITY SELECTION

Selection of communities (counties) for analysis was based on (1) the presence of a major U.S. Army installation, and (2) whether the community (county) was within the economic impact region of the installation. A 30-mile radius around the Army installation was the criterion used to identify the impact area, since this was consistent with the radius used for other socioeconomic impact research being done at CERL. Using these two criteria, more than 100 Army installations and 564 counties were identified for analysis (see the Appendix).



### 3 THE DATA SOURCE

The data used for this analysis were collected from the U.S. Census Bureau publication Gross Migration by County: 1965-1970.<sup>20</sup> Figure 1 is an example of the data. Actual elements used in the analysis are highlighted. There are four significant limitations to these data.

First, the data were taken from a 15 percent population sample, which creates problems because of the unreliability of small numbers. Therefore, eliminating these small numbers (for example, numbers less than 50) will improve the reliability of the analysis results.

A second problem is that migrants are considered as having lived in County X in 1965 and County Y in 1970, and vice versa. Migrants who moved several times between 1965 and 1970 will therefore be shown as having made only one migration. In addition, migrants who left a county after 1965 but returned to that county before 1970 were not counted as migrants. Also, military migrants included three categories: those who were in the military in 1965 and in 1970, those who were in the military in 1965 but not in 1970, and those who were in the military in 1970 but not in 1965.

A third problem with the data is the manner in which the Census Bureau aggregated it. The group identified as "not in the military or college in 1965 or 1970" contains both civilians and also a subset -- dependents of military personnel and dependents of college students. In addition, when this group of migrants is subtracted from the total, the remainder is a group which can be called "military personnel and college students." No effort was made to separate this group into its two components.

The last significant problem is the lack of proper geographic referencing of migrants. The destinations of outmigrants or origins of immigrants are not identified. The data were simply gross numbers of immigrants/outmigrants for each U.S. county.

These are the best data available, and while their limitations are numerous, they are surmountable.

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<sup>20</sup> Gross Migration by County -- 1965 to 1970; Current Population Report, Series P-25, No. 701 (U.S. Bureau of the Census, 1977).



#### 4 ALLOCATION METHOD

To overcome some of the data limitations and to identify significant migration patterns, several allocation procedures were used to single out special groups of migrants and to eliminate counties with unreliable data.

Since this study deals with DOD influences on local communities, it was first necessary to identify DOD migrants. This was done by applying the following allocations routine to the migration data for the group "military personnel and college students" for each county:

$$MM = \frac{TMC}{1 + CS/MLF} \quad [Eq 1]$$

where: MM = the number of military migrants  
(either immigrants or outmigrants)

TMC = the total number of military  
and college student migrants

CS = the number of college students

MLF = the number of military in  
the local labor force.

It is assumed in this allocation procedure that the ratio of military migrants to college student migrants is the same as the ratio of the number of military personnel to the number of college students in an area.

To isolate DOD-related impacts on local communities, it was necessary to reduce the data set to include only those counties having a significant DOD population. Concurrently, the data set had to be adjusted to respond to the weaknesses noted in Chapter 3. Thus, only counties which had (1) fewer than 300,000 total civilian immigrants or outmigrants, and (2) more than 50 migrants in any group of migrants (i.e., military immigrants and outmigrants, and civilian immigrants and outmigrants) were included in the analysis. The influence of the presence of DOD populations was analyzed by selecting (an iterative process) those counties which had progressively larger military populations. That is, once the data were adjusted to eliminate inherent weaknesses, they were sorted and analyzed in groups based on the percentage of the total labor force which was military. The actual number of counties analyzed according to these procedures varied between 17 and 338. The analysis technique used here, if successful, will partially determine the feasibility of including such an analysis in a system such as the

Economic Impact Forecast System (EIFS)<sup>21</sup> and the feasibility of using population as a more important basic indicator of social change.

The documentation of this study can provide a basis for including a measure of DOD-induced migration into the predictive and analytical capabilities of DOD assessment methodologies. If the results of this study are reliable, a more applications-oriented derivation technique can be developed using the necessary available data and may be included as part of the Environmental Technical Information System (ETIS).\*

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<sup>21</sup> The Economic Impact Forecast System -- Descriptor and User Instructions, DA PAM 200-2 (Department of the Army, December 1976).

\* ETIS is a computerized environmental assessment tool developed by the U.S. Army Construction Engineering Research Laboratory which includes several specialized systems designed to provide the user with information useful for assessing various impacts of military projects or activities on the environment.

## 5 DISCUSSION OF ANALYSIS OF DOD-RELATED MIGRATION

The analysis of DOD-related migration is based on an iterative selection of counties which meet certain labor force criteria. The research hypothesis is that there is a significant relationship between civilian migration and military migration in communities near DOD installations. To test this hypothesis, two scatter diagrams were drawn, and simple regression analyses were performed, using the number of military migrants as the independent variable and the number of civilian migrants as the dependent variable. Figure 2 shows the scattergram for immigration, and Figure 3 shows the scattergram for outmigration. No significant relationships were discernible from these scattergrams and the regression analyses ( $r = .28$  for immigration, and  $r = .34$  for outmigration).

Of the 338 counties included in this first analysis, 195 contained very few, if any, military personnel residents. Therefore, it was necessary to remove these counties from the analysis.

Counties were subsequently analyzed by sorting them into groups based on the size of the military labor force in each county; differences of 1 percent were used for the various analyses. For example, first only those counties having at least 1 percent of the labor force in the military (MLF) were analyzed; next, counties having 2 to 3 percent were analyzed, and so forth, until the MLF level was 10 percent.

Figures 4 and 5 show the distribution of counties having 2 percent or more MLF. Note especially in Figure 4 that, although the total scatter of dots appears random, certain patterns do exist. At each additional level of MLF, there appears to be a high correspondence between the two variables (Table 1). Table 1 shows that although high  $r$  values were attained, there is considerable variation in the  $a$  (intercept) and  $b$  (slope) values. This initially suggests that there is a definite relationship between civilian migration and military migration in the counties studied, but that the relationship seems to vary with MLF size.

Further analysis by combining groups of counties based on percent MLF and testing for significant changes in  $r$  values led to the formation of three groups of counties based on their respective MLF levels. Figures 6 and 7 show the trend lines drawn through the scattergrams of Figures 4 and 5 for each group of counties for immigration and outmigration, respectively.

While all  $r$  values were significant at the .001 level (Table 2), the three groups of counties did not discriminate between counties within the groups as well as had been anticipated. One regression equation for each 1 percent increment in MLF would probably be best, but it would be statistically impractical to construct at this time. However, three conclusions can be drawn from the analysis so far.

1. There is a definite relationship between civilian migration and military migration.

2. This relationship appears to be related to MLF size. Note in Figures 6 and 7 that as the MLF size increases, the relationship between the variables (as measured by the b values) decreases from 9.34 to .75 for immigration and 12.2 to 2.1 for outmigration. Thus, the size of the labor force should probably be included in the analysis as an independent variable and not as a criterion for grouping counties as has been done so far.

3. Each of the three groups of counties shares similar characteristics. Those counties in the group having 2 to 9 percent MLF are primarily Army depots and arsenals which employ large numbers of civilians relative to the numbers of military employed. Counties with more than 33 percent MLF have training installations in or near them. Consequently, large numbers of military personnel live in the area relative to the number of civilian employees who work at the installation. This trend is very clear in the b values of the regression equations, again substantiating the importance of MLF size in this migration relationship.

The independent variable was just described as the size of the military labor force measured as a percentage of the total labor force. The dependent variable now becomes the ratio of civilian migrants to military migrants. This ratio identifies how many civilian migrants there are in a county for every military migrant. The b values or slopes noted in Figures 6 and 7 are really the "average" of this ratio for counties which fall into one of the three identified groups of counties. The hypothesis states that, as the size of the military labor force increases (as a percentage of the total labor force), the ratio of civilian migrants to military migrants decreases. If this hypothesis remains valid, the relationship between civilian and military migration will be described accurately.

Figures 8 and 9 provide the results of this part of the analysis. There is clearly a curvilinear relationship (a power function curve) for both immigration and outmigration. If this relationship is defined as a linear one, a log transformation of the data must be used for each variable. Figures 10 and 11 provide these results.

The "r" values in this case are -.96 and -.91 for immigration and outmigration, respectively. It is clear from the scattergrams and the corresponding correlation coefficients that the number of civilian migrants per military migrant is a function of MLF size. The functions are:

$$Y_{IA} = -.276 - .95X_A \quad [\text{Eq 2}]$$

$$Y_{OA} = .085 - .96X_A \quad [\text{Eq 3}]$$



where:

$Y_{IA}$  = log of the ratio of the number of civilian  
immigrants per military immigrant in County A

$Y_{OA}$  = log of the ratio of the number of civilian  
outmigrants per military outmigrant in County A

$X_A$  = log of the percentage of the total labor market  
which is military for County A.

The number of civilian migrants per military migrant can be calculated by taking the antilog value of either  $Y_{IA}$  or  $Y_{OA}$ . Thus, for the migration period being studied, the ratio of civilian migrants to military migrants, given the percentage of the labor force which is military, can be predicted with a high degree of reliability. In addition, the number of civilian migrants, given the number of military migrants, can be estimated accurately.



## 6 CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The data in this report describe a positive relationship between military migration and civilian migration in communities surrounding Army installations. This relationship is determined by the size of the military labor force in relation to the size of the civilian labor force.

The number of civilian migrants into or out of a county between 1965 and 1970 can be estimated from data reflecting the size of the military labor force and the number of military migrants involved. For example, if County A has 16 percent of the total labor force in the military, the ratio of civilian immigrants to military immigrants is approximately three to one (3:1) (Figure 8). Thus, if County A had 8500 military immigrants, 25,000 civilian immigrants could be expected.

The number of civilian migrants expected to move into or out of a county, given a change in the number of military personnel at an installation, can be predicted from existing data; however, it must be assumed that the trend in military strength which existed between 1965 and 1970 has not changed. This assumption limits the effective use of the predictive model, since this trend has been reversed since 1970.

Evidence suggests that in areas having small civilian populations and large military installations, civilian migration may be composed primarily of military dependents and direct-hire civilians and their dependents.

The data used in this research are too outdated to be of real significance to accurate population projections for Army-induced migration, but they do support the contention that civilian migration is directly related to military migration and that the relationship in many areas in the United States is quite strong.

Accurate population forecasting techniques are needed in any environmental impact assessment, and for military migration purposes, can be derived only from current data reflecting both civilian and military migration. These data are not readily available and can only be obtained through special survey procedures.

The relationship between military-dependent migration and total civilian migration was noted, but the relationship is still not completely understood. A knowledge of this relationship will be needed before accurate population forecasts can be made.

At present, little is known about the migration behavior of civilian DOD workers. Additional information in this area will improve population forecasts.

#### Recommendations

DOD decisions concerning the movement of troops between installations or any other operations change directly impact migration behavior, but the exact consequences of such decisions on the total redistribution of people in the United States are still unknown. Therefore, this type of information should be obtained to help forecast changes in population size that result from changes in the operations of Army installations.

Table 1  
Variation in Regression Models

<u>MLF</u>	<u>Number</u>	<u>r Coefficient Immigration</u>	<u>r Coefficient Outmigration</u>	<u>a Value</u>	<u>b Value</u>
>0%	338	.278		26995	1.67
>0%	338		.342	20924	3.18
>1%	143	.423		21224	1.82
>1%	143		.532	29186	3.32
>2%	113	.494		17031	1.93
>2%	113		.576	10833	3.42
>3%	101	.520		14895	1.95
>3%	101		.622	9108	3.32
>5%	86	.550		12471	1.84
>5%	86		.705	7379	3.04
>7%	64	.631		6500	1.82
>7%	64		.821	3173	2.98
>10%	54	.689		3709	1.82
>10%	54		.905	2297	2.83

Table 2  
Regression Results of Combined MLF Groups

<u>MLF</u>	<u>N</u>	<u>R in</u>	<u>a</u>	<u>b</u>	<u>R out</u>	<u>a</u>	<u>b</u>
2-9%	59	.94	3891	9.45	.90	-3505	13.4
9-33%	37	.85	3300	2.47	.95	2811	3.27
>33%	17	.72	2919	.75	.98	-1102	2.16

STATE AND COUNTY	TOTAL	SEX		RACE		AGE IN 1970										NOT IN THE MILITARY OR COLLEGE IN 1965 OR 1970	TOTAL ALLOCATED
		MALE	FEMALE	WHITE	BLACK	15 YEARS	19 YEARS	20 YEARS	29 YEARS	30 YEARS	39 YEARS	44 YEARS	49 YEARS	54 YEARS	59 YEARS		
COLORADO - Continued																	
COSTILLA																	
NET	-365	-365	-365	-663	-16	-94	-135	-206	-33	-115	-78	-67	-67	-67	-67	-67	-71
IMMIGRANTS	100	119	188	302	82	82	11	50	33	52	72	9	23	23	23	23	23
OUTMIGRANTS	100	479	251	965	16	176	146	256	66	167	150	150	150	150	150	150	122
CRUZZ																	
NET	-858	-212	-446	-625	-33	-98	-151	-123	-30	-103	-91	-62	-62	-62	-62	-62	-148
IMMIGRANTS	523	279	244	523	1	142	26	61	60	90	91	88	88	88	88	88	28
OUTMIGRANTS	1181	491	690	1148	33	240	177	184	90	181	182	156	156	156	156	156	176
CUSTER																	
NET	-259	-70	-180	-259	-	-77	-46	-67	-34	19	-19	-35	-35	-35	-35	-35	-172
IMMIGRANTS	249	142	107	249	-	76	11	5	5	88	76	88	88	88	88	88	26
OUTMIGRANTS	508	212	297	508	-	135	57	72	34	67	95	95	95	95	95	95	200
DELTA																	
NET	108	119	-13	133	-18	280	-226	-408	-77	141	300	177	177	177	177	177	237
IMMIGRANTS	3645	1845	1800	3645	1	1078	277	303	233	718	717	360	360	360	360	360	237
OUTMIGRANTS	3537	1726	1813	3537	23	798	503	801	310	577	617	192	192	192	192	192	237
DENVER																	
NET	-23800	-12633	-11166	-26730	3006	-12948	-812	7104	-501	-10272	-4362	-1968	-1968	-1968	-1968	-1968	-721
IMMIGRANTS	134221	67757	66464	120187	9161	27010	13077	20551	22101	24511	15078	4024	4024	4024	4024	4024	1221
OUTMIGRANTS	156820	79390	76624	146917	6155	36058	14780	22447	22602	34783	19420	7912	7912	7912	7912	7912	1848
DOLANS																	
NET	-508	-237	-269	-508	-	-46	-77	-46	-55	-58	-58	-58	-58	-58	-58	-58	-109
IMMIGRANTS	416	198	218	416	-	147	46	18	66	87	87	87	87	87	87	87	47
OUTMIGRANTS	922	435	487	922	-	243	123	112	103	155	160	66	66	66	66	66	156
DOUGLASS																	
NET	1842	907	935	1842	32	875	66	-170	68	607	121	5	5	5	5	5	-67
IMMIGRANTS	3520	1876	1644	3520	37	1170	120	186	280	555	450	132	132	132	132	132	108
OUTMIGRANTS	1678	870	808	1678	5	365	263	316	221	258	338	127	127	127	127	127	175
EMERY																	
NET	1413	647	766	1413	-	325	81	232	250	238	266	-0	-0	-0	-0	-0	430
IMMIGRANTS	3435	1740	1695	3435	-	914	283	456	524	702	467	59	59	59	59	59	360
OUTMIGRANTS	2022	1093	948	2022	-	589	202	224	274	464	201	68	68	68	68	68	180
ELBERT																	
NET	487	255	232	487	-10	360	-11	-100	28	174	80	-35	-35	-35	-35	-35	16
IMMIGRANTS	1273	676	597	1273	-	455	82	93	82	288	182	113	113	113	113	113	131
OUTMIGRANTS	786	421	365	786	10	95	93	202	54	112	112	148	148	148	148	148	115
EL PASO																	
NET	41947	21076	19861	37231	3007	7130	4007	20367	1868	6031	866	1120	1120	1120	1120	1120	8126
IMMIGRANTS	109467	63112	46355	100868	7343	24840	10718	29968	12850	21066	2660	6637	6637	6637	6637	6637	14700
OUTMIGRANTS	67520	32036	31994	63637	3346	17701	6711	9601	10982	14835	8500	1460	1460	1460	1460	1460	8673
FREMONT																	
NET	1303	677	626	1303	-13	565	-108	-400	56	581	480	360	360	360	360	360	784
IMMIGRANTS	4701	2040	2711	4701	51	1246	451	488	403	1252	1124	674	674	674	674	674	1324
OUTMIGRANTS	4378	2163	2105	4378	64	726	640	888	347	771	635	285	285	285	285	285	540
GARFIELD																	
NET	-407	-412	-395	-407	3	-607	-151	-92	152	-383	127	-73	-73	-73	-73	-73	-198
IMMIGRANTS	4807	2174	2633	4807	3	1074	466	563	605	683	741	215	215	215	215	215	360
OUTMIGRANTS	5504	2586	2918	5504	1681	617	605	605	453	1246	614	288	288	288	288	288	658
GILPIN																	
NET	-103	-10	-93	-103	-	-5	-45	-46	-18	-55	-23	-1	-1	-1	-1	-1	-60
IMMIGRANTS	578	295	283	578	-	168	100	16	27	106	116	45	45	45	45	45	86
OUTMIGRANTS	681	314	367	681	-	173	55	62	45	161	141	66	66	66	66	66	146
GRAND																	
NET	115	130	-14	115	-	114	-12	-60	61	63	-20	-62	-62	-62	-62	-62	-73
IMMIGRANTS	1367	707	660	1367	-	382	107	102	217	331	197	71	71	71	71	71	118
OUTMIGRANTS	1252	577	674	1252	-	268	119	171	126	236	217	113	113	113	113	113	191
HUNTER																	
NET	585	308	277	585	27	-194	881	614	-362	-200	-111	-36	-36	-36	-36	-36	-8
IMMIGRANTS	3501	1947	1554	3501	32	325	1031	1273	280	360	318	58	58	58	58	58	235
OUTMIGRANTS	2916	1639	1357	2916	5	524	150	659	622	560	429	94	94	94	94	94	243
HURLER																	
NET	-185	-81	-104	-185	-	-70	-20	-76	0	-35	-38	-8	-8	-8	-8	-8	-10
IMMIGRANTS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
OUTMIGRANTS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
HURON																	
NET	-553	-241	-312	-553	-10	-194	-127	-178	38	-75	-11	-6	-6	-6	-6	-6	-53
IMMIGRANTS	870	446	424	870	0	188	82	82	112	124	140	63	63	63	63	63	136
OUTMIGRANTS	1383	687	696	1383	10	382	200	260	74	199	160	60	60	60	60	60	189
JACKSON																	
NET	-208	-151	-148	-208	-	-50	-66	-11	31	-78	-68	-76	-76	-76	-76	-76	-63
IMMIGRANTS	611	270	341	611	-	150	23	133	60	132	98	0	0	0	0	0	14
OUTMIGRANTS	819	421	396	819	-	200	110	144	68	200	128	38	38	38	38	38	77
JEFFERSON																	
NET	38302	18800	19502	37400	177	11016	1808	1581	6561	11671	3581	1140	1140	1140	1140	1140	2160
IMMIGRANTS	85200	42387	42903	84318	312	23265	7346	8216	11174	21808	10181	3242	3242	3242	3242	3242	7350
OUTMIGRANTS	46898	23587	23401	46898	135	11349	5546	6635	4573	10227	6600	2058	2058	2058	2058	2058	5170
KIDWELL																	
NET	-580	-243	-337	-580	-12	-52	-64	-64	-67	-76	-76	-76	-76	-76	-76	-76	-18
IMMIGRANTS	421	195	226	421	-	142	53	56	15	105	36	14	14	14	14	14	36
OUTMIGRANTS	801	438	363	801	12	174	97	152	82	130	112	65	65	65	65	65	54
KIT CARSON																	
NET	-560	-238	-322	-560	-23	-19	-255	-107	-54	-76	-16	7	7	7	7	7	-120
IMMIGRANTS</																	

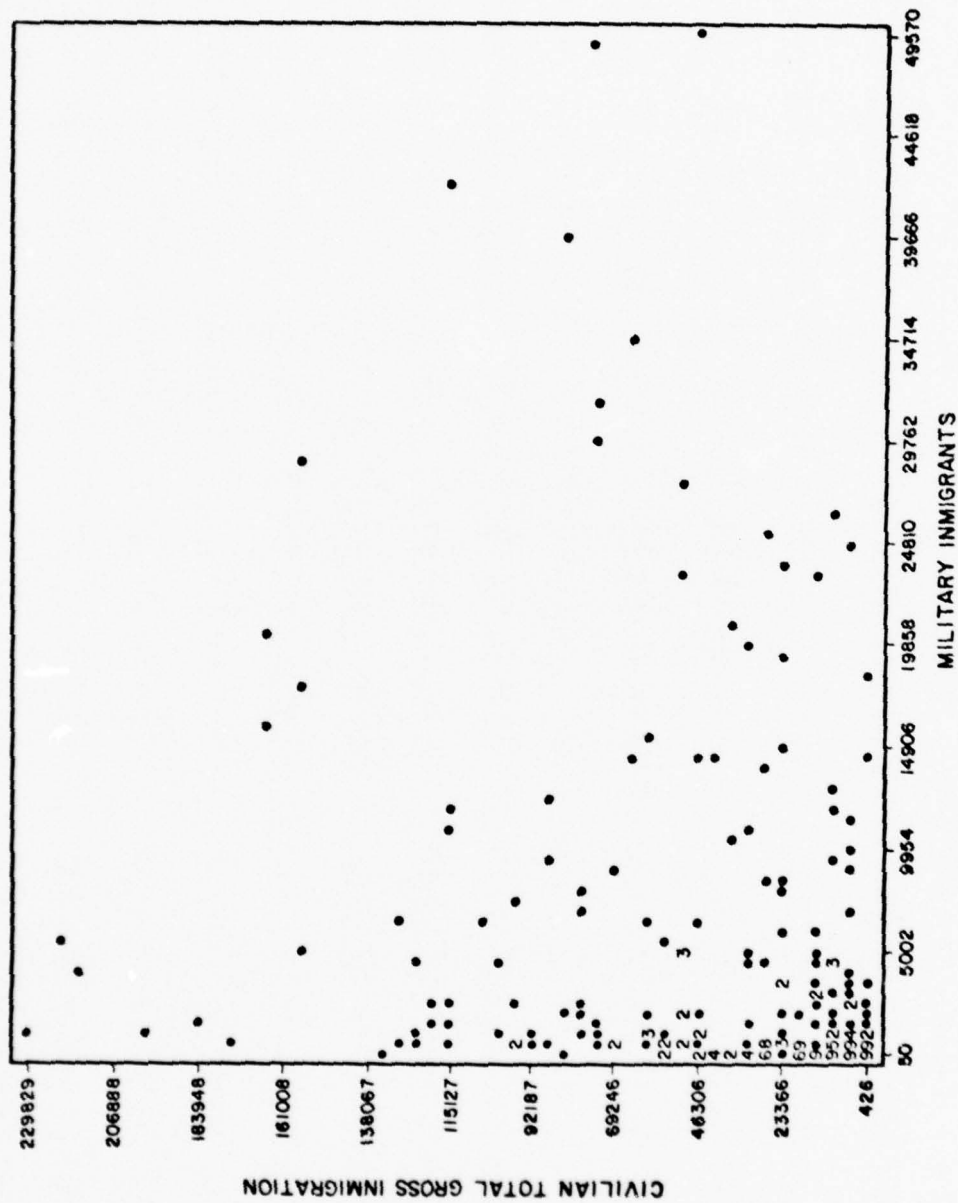


Figure 2. Scattergram for immigration: Civilian total gross immigration with military immigration.



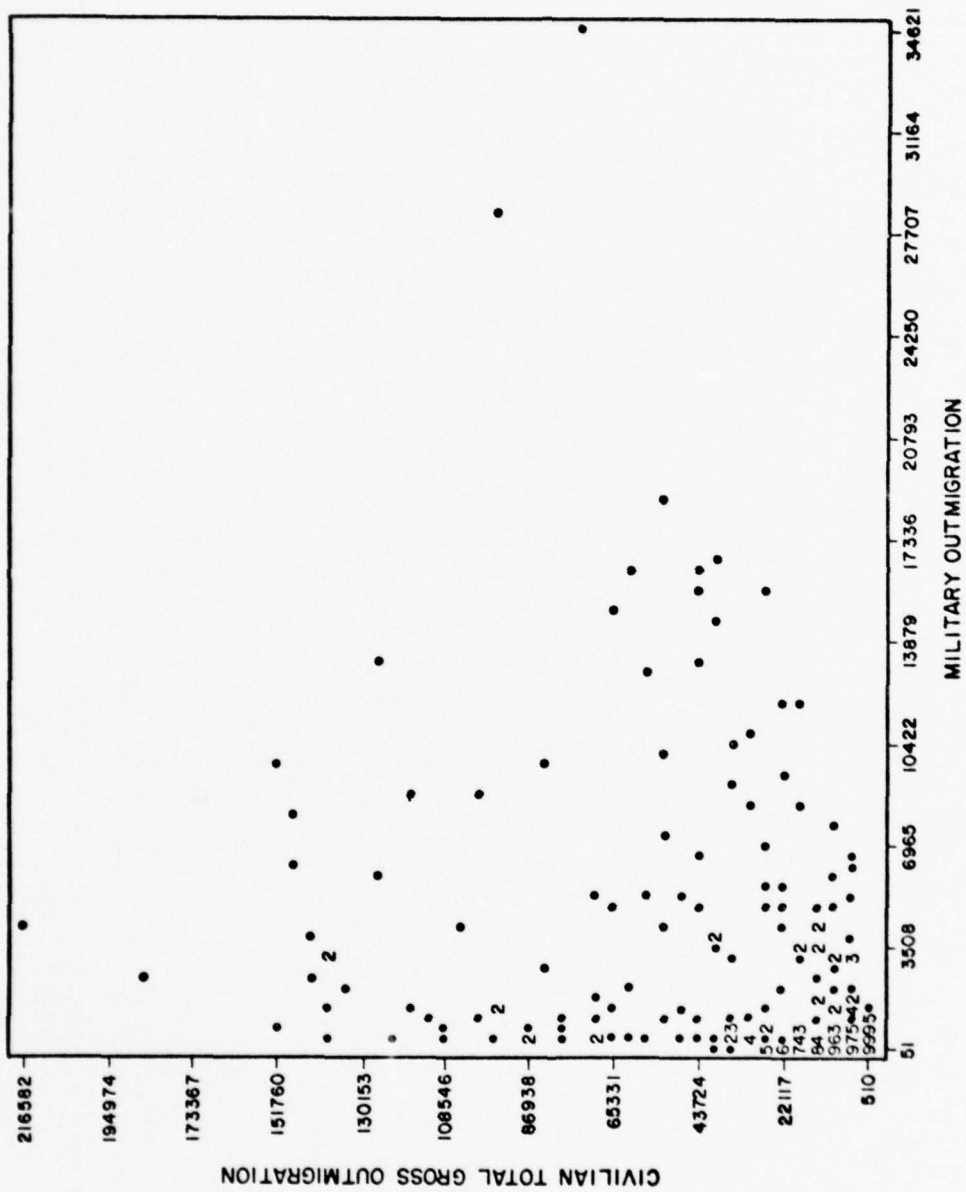


Figure 3. Scattergram for outmigration: Civilian total gross outmigration with military outmigration.

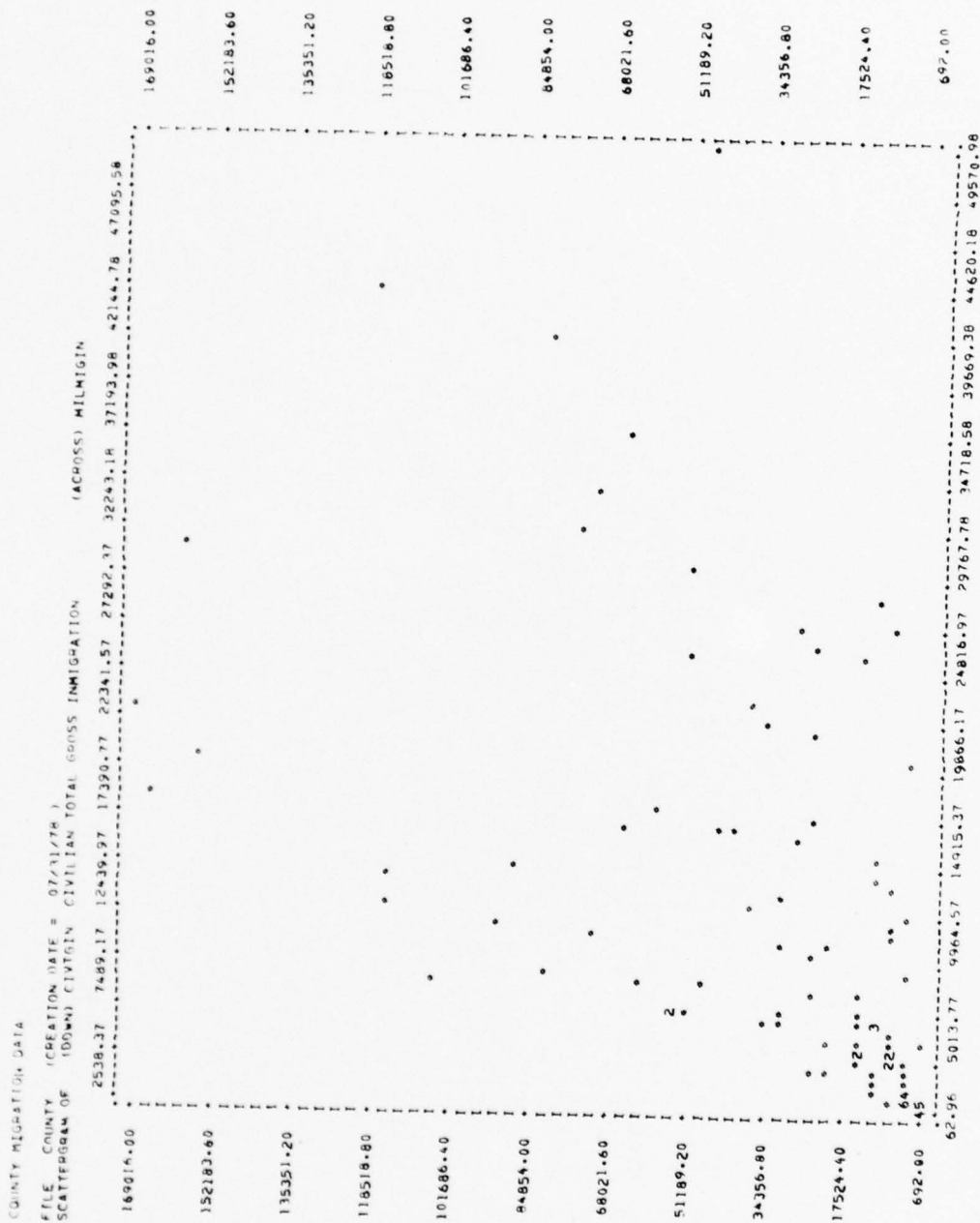


Figure 4. Distribution of counties having more than 2 percent military labor force (MLF): Civilian total gross immigration with military immigration.

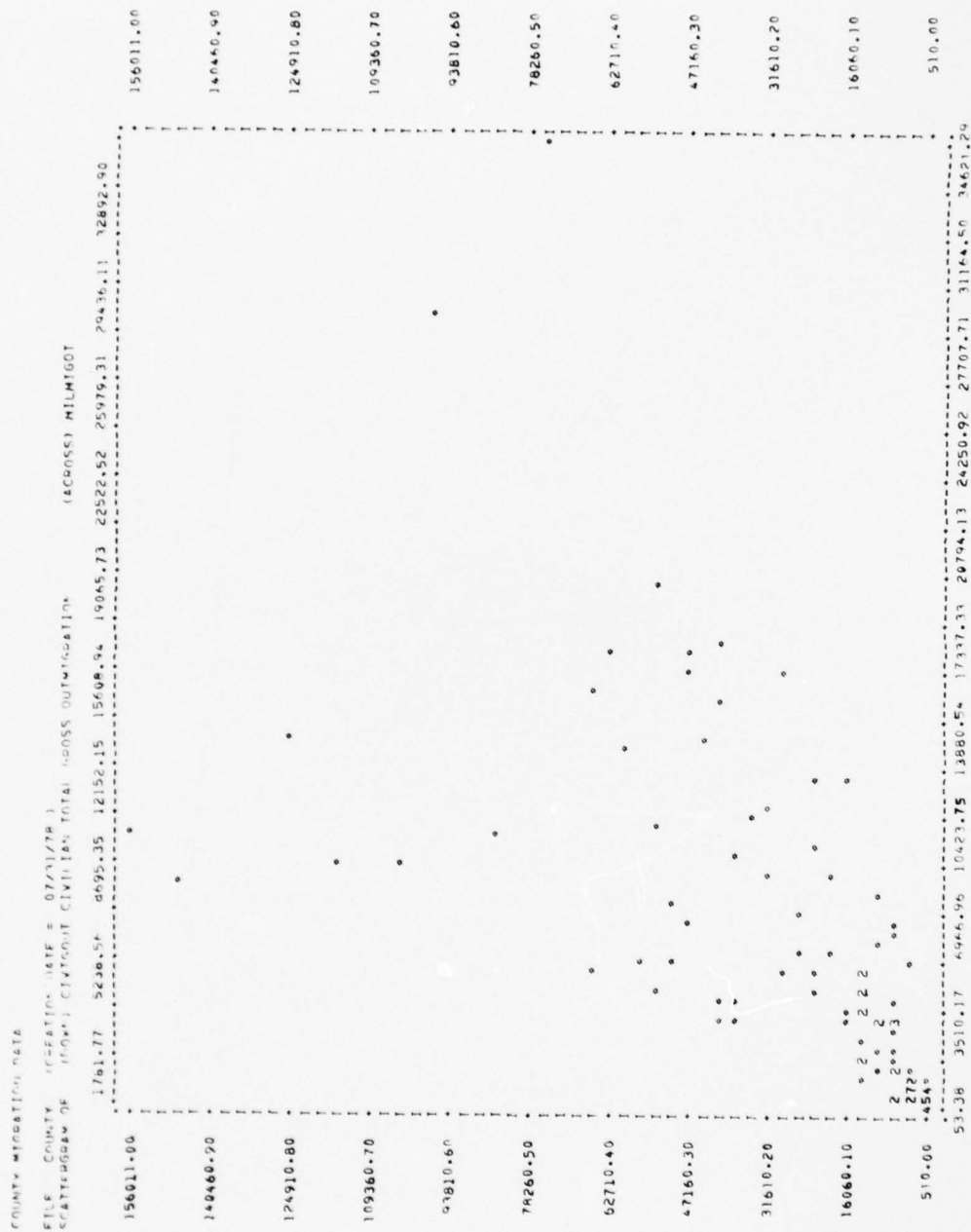


Figure 5. Distribution of counties having more than 2 percent MLF: Civilian total gross outmigration with military outmigration.

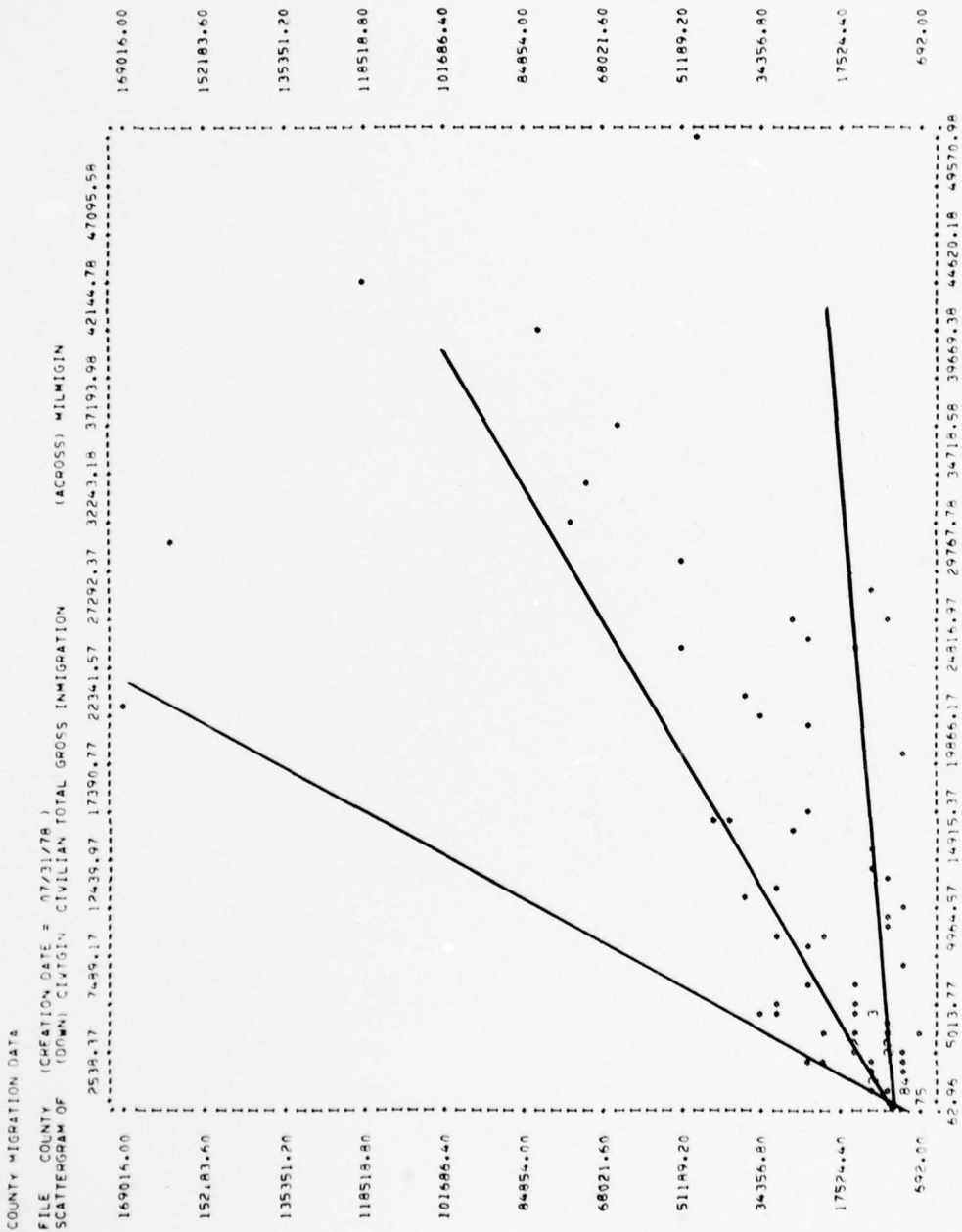


Figure 6. Trend lines: Civilian total gross immigration with military immigration.



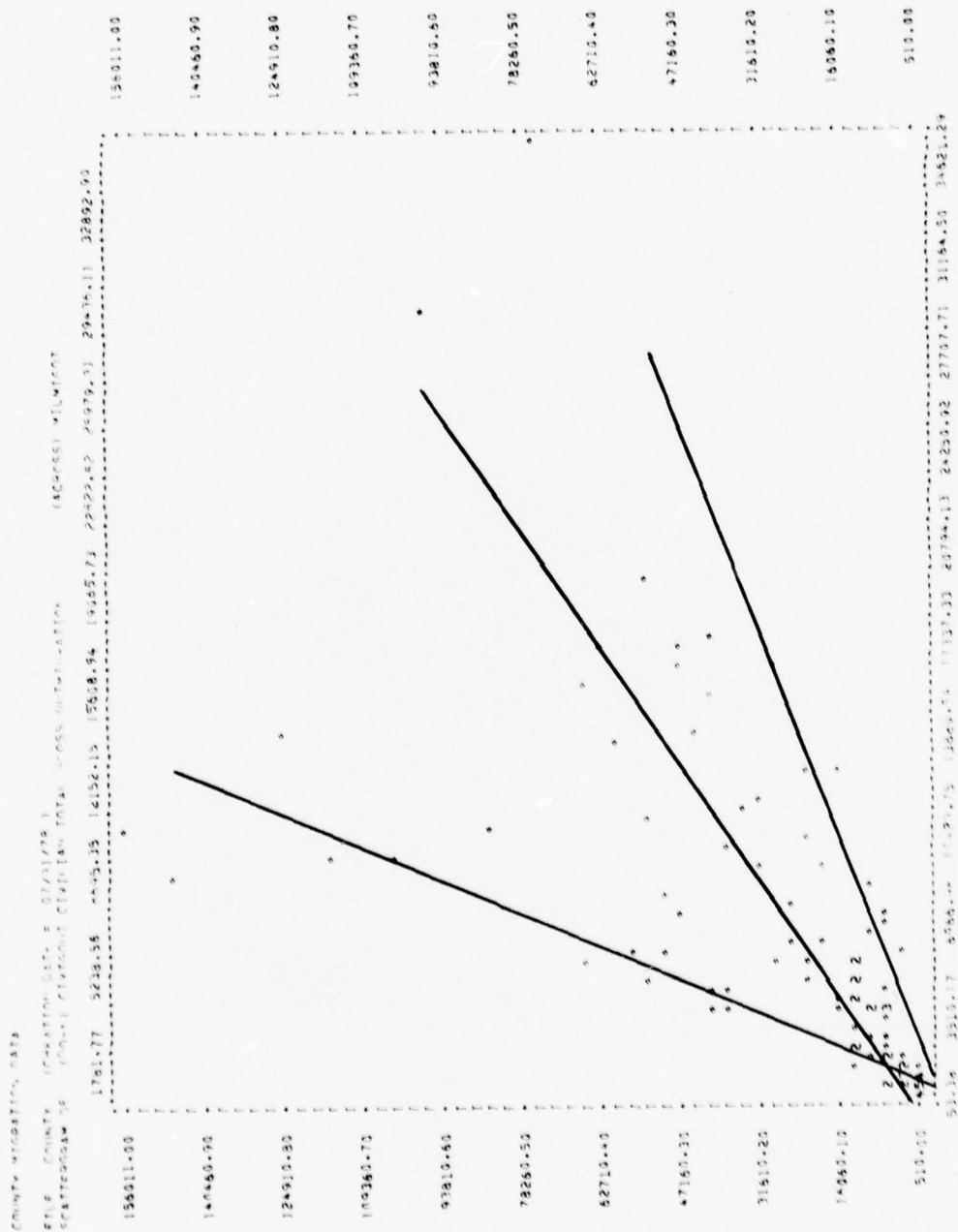


Figure 7. Trend lines: Civilian total gross outmigration with military outmigration.

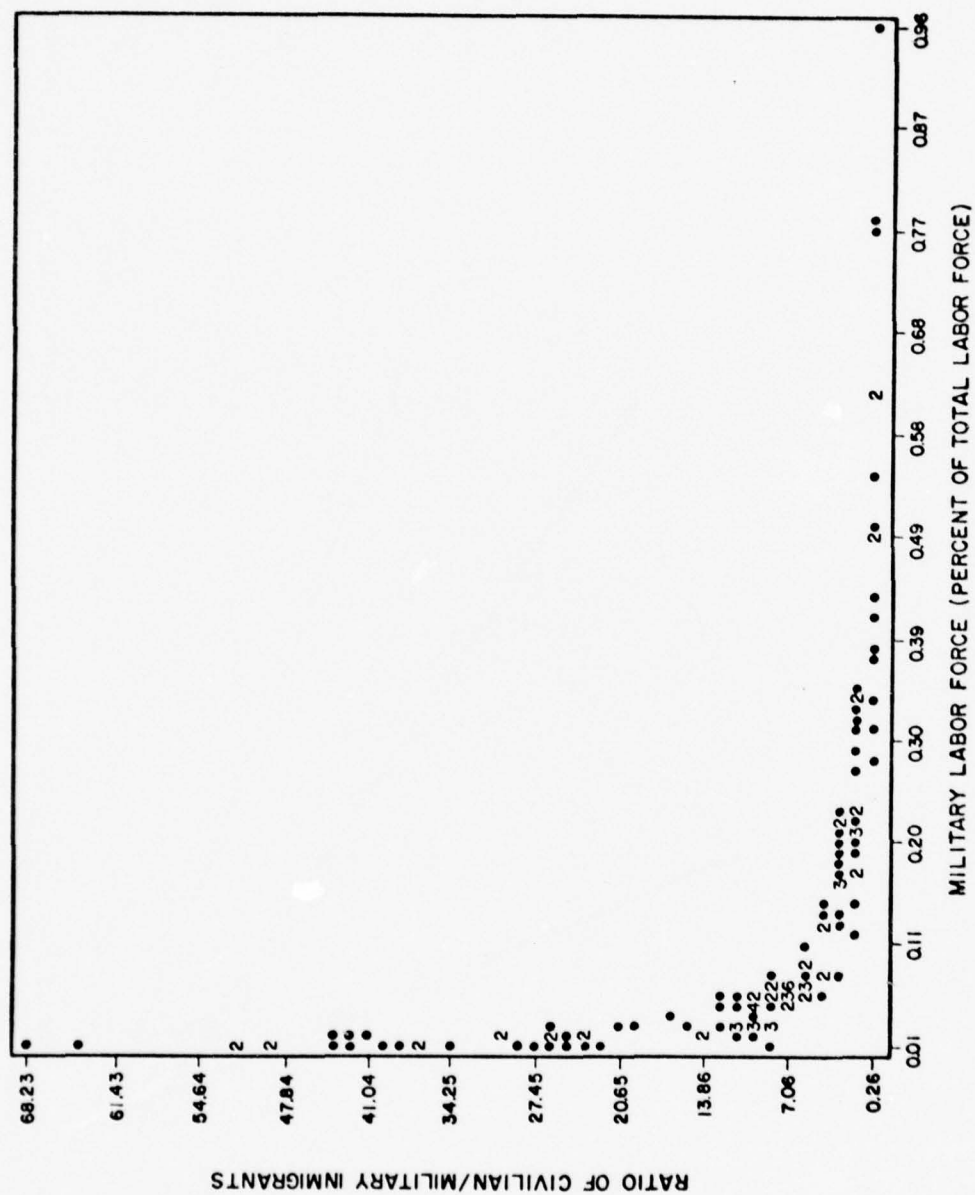


Figure 8. Relationship between civilian and military migration (immigration and the MLF).



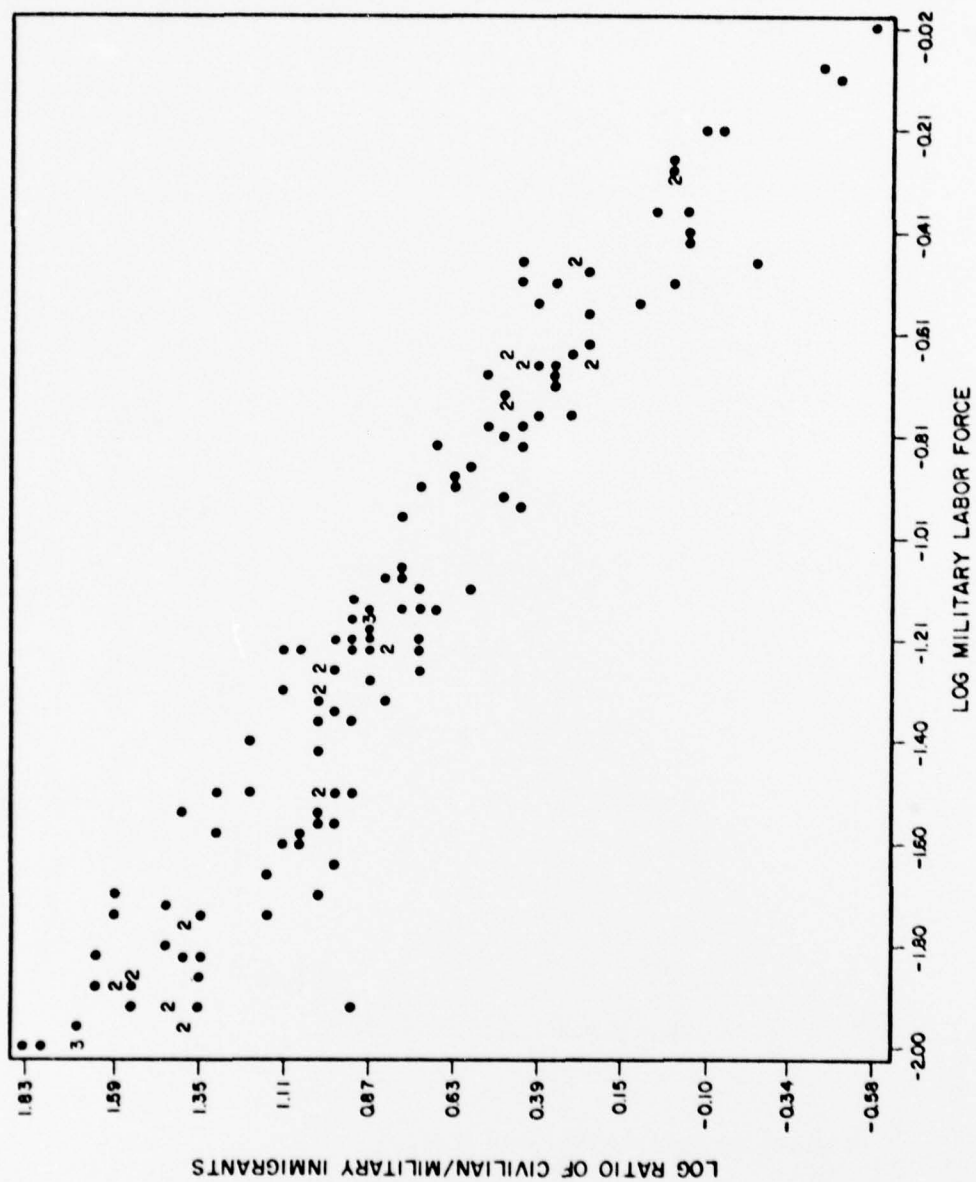


Figure 10. Log transformation of the immigration relationship between civilian and military.



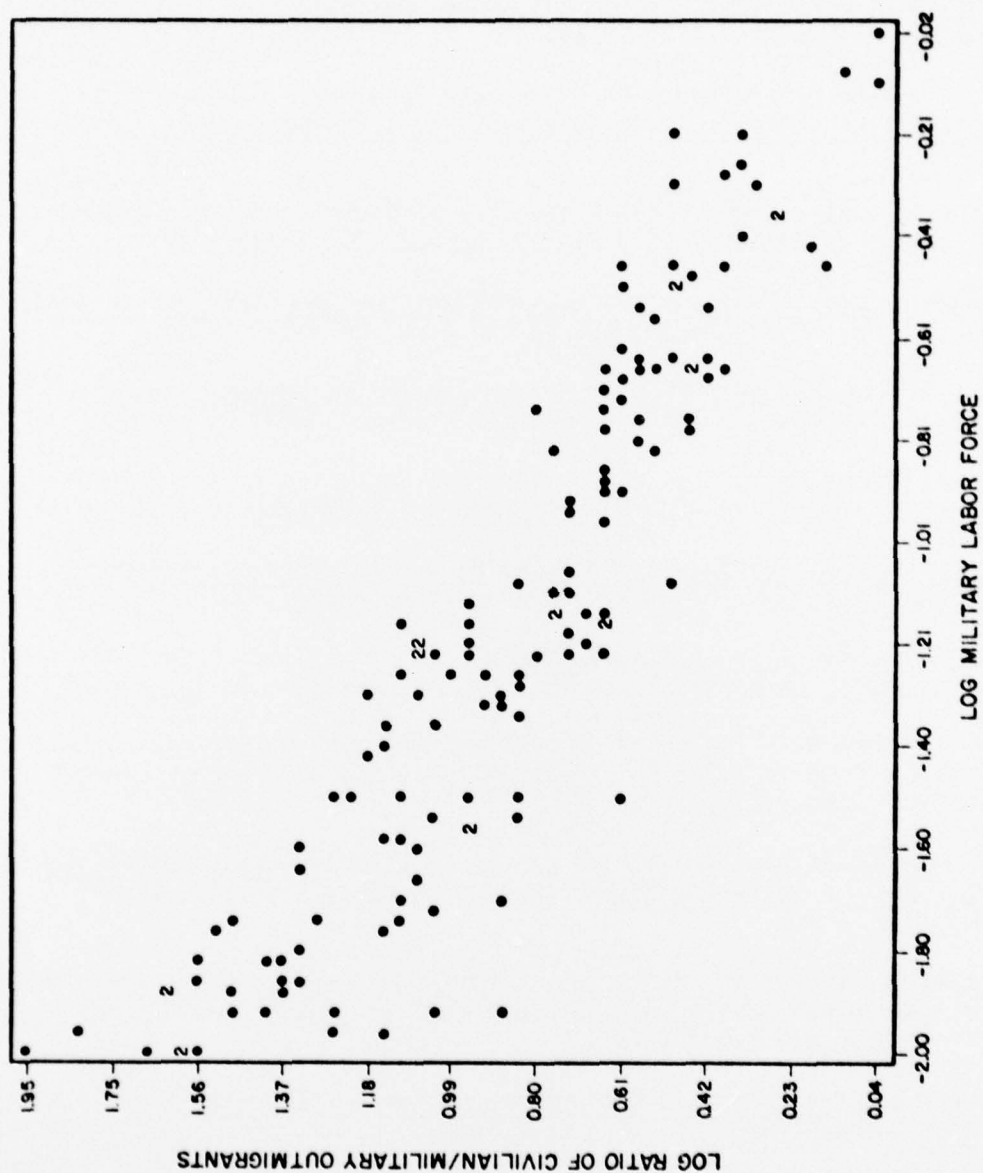


Figure 11. Log transformation of the outmigration relationship between civilian and military.

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APPENDIX:  
COUNTIES USED IN MIGRATION ANALYSIS



CASE-NO	ID1	COUNTY	NAME	STATE	CIVILIAN IN	MIGRANTS OUT	PERCENT OF LABOR FORCE MILITARY	MILITARY IN	MIGRANTS OUT
1	1.	CALHOUN		AL	12194.	12247.	.	4332.	2180.
2	3.	CLAY		AL	1287.	1634.	0	97.	251.
3	8.	HANDOLPH		AL	1832.	2089.	0	200.	454.
4	11.	CHATIAHO	OCHEE	GA	4791.	5704.	1.	18129.	5201.
5	13.	LEE		AL	9154.	9280.	0.	214.	131.
6	14.	MAHON		GA	426.	1184.	0	54.	165.
7	15.	MUSCOGEE		GA	33043.	42196.	.	11068.	14672.
8	16.	RUSSELL		AL	5327.	7426.	0.	569.	800.
9	29.	FRANKLIN		TN	3332.	3457.	0.	64.	62.
10	30.	GILES		TN	2442.	2542.	0	391.	557.
11	33.	LINCOLN		TN	2707.	3884.	0.	178.	560.
12	34.	MADISON		AL	33326.	41875.	0.	4946.	3336.
13	37.	MORGAN		AL	12327.	11911.	0.	77.	109.
14	38.	BARBOUR		AL	2674.	2828.	0.	84.	210.
15	39.	COFFEE		AL	6247.	4187.	0.	1172.	735.
16	40.	DALE		AL	13438.	8666.	1.	12849.	3751.
17	41.	GENEVA		AL	3088.	2853.	0.	105.	152.
18	44.	HOUSTON		AL	8991.	7248.	0.	215.	352.
19	46.	COCHISE		AZ	15312.	15205.	.	5073.	3350.
20	47.	PIMA		AZ	81854.	58855.	0.	7076.	5359.
21	49.	IMPERIAL		CA	13892.	17425.	0.	335.	548.
22	50.	YUMA		AZ	17390.	14274.	.	3661.	2337.
23	53.	GRANT		AR	1785.	1289.	0	114.	249.
24	54.	JEFFERSON	N	AR	10455.	13359.	0.	127.	161.
25	55.	LINCOLN		AR	2073.	1826.	0	68.	306.
26	56.	LONOKE		AR	5129.	4383.	0.	60.	167.
27	57.	PULASKI		AR	48603.	47840.	0.	6373.	6585.
28	59.	CONTRA C	OSTA	CA	116482.	83003.	0.	2685.	2692.
29	60.	MARIN		CA	52844.	41296.	0.	4845.	3748.
30	61.	NAPA		CA	15571.	12027.	0.	302.	281.
31	62.	SAN FRAN	CISCO	CA	116394.	149631.	0.	12075.	7858.
32	63.	SAN MATEO	O	CA	122271.	100092.	0.	1309.	1148.
33	64.	SOLANO		CA	43341.	35207.	.	14441.	10302.
34	65.	SONOMA		CA	48252.	30387.	0.	1099.	781.
35	70.	SANTA CL	ARA	CA	221811.	141996.	0.	5566.	3172.
36	72.	MONTEREY		CA	52339.	45847.	.	27936.	13171.
37	73.	SAN LUIS	OBISPO	CA	25830.	19103.	0.	379.	217.
38	75.	VENTURA		CA	106642.	67122.	0.	6403.	4816.
39	77.	SAN BENI	TO	CA	3812.	3771.	0	406.	698.
40	80.	ALAMEDA		CA	165859.	156011.	0.	15663.	9855.
41	95.	ELDORADO		CA	14777.	11840.	0.	121.	138.
42	96.	SACRAMEN	TO	CA	116582.	118248.	0.	10697.	8528.
43	97.	SAN JUAQ	UIN	CA	44967.	38107.	0.	679.	653.
44	99.	SUTTER		CA	10107.	8415.	0.	459.	507.
45	100.	YOLU		CA	14352.	16240.	0.	188.	91.
46	101.	YUHA		CA	13012.	14416.	.	4376.	3463.
47	103.	SAN BERN	ARDINO	CA	158106.	126069.	0.	17791.	13250.
48	106.	SANTABAR	BARA	CA	62286.	53620.	0.	6583.	4343.
49	107.	LASSEN		CA	4534.	4796.	0.	337.	312.
50	108.	WASHOE		NV	32359.	29000.	0.	175.	161.
51	109.	ELPASO		CO	66937.	47402.	.	34740.	16441.

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CASE-NO	ID1	COUNTY NAME	STATE	CIVILIAN IN	MIGRANTS OUT	PERCENT OF LABOR FORCE MILITARY	MILITARY IN	MIGRANTS OUT
52	110.	FREMONT	CO	5330.	3541.	0.	56.	107.
53	111.	PUEBLO	CO	12001.	16612.	0.	103.	129.
54	112.	TELLER	CO	1637.	1525.	0.	72.	62.
55	116.	ADAMS	CO	54718.	38827.	0.	5183.	3230.
56	117.	ARAPAHOE	CO	55203.	40826.	0.	5117.	3940.
57	118.	BOULDER	CO	36636.	19531.	0.	312.	153.
58	119.	CLEAR CR	EEK	2044.	1349.	0	116.	152.
59	120.	DENVER	CO	97507.	128640.	0.	7418.	5928.
60	124.	JEFFERSON	N	73462.	39207.	0.	437.	288.
61	125.	WELD	CO	16996.	14612.	0.	94.	52.
62	129.	OKALOOSA	FL	24456.	21350.	.	14114.	8461.
63	130.	SANTA RO	SA	9249.	6911.	.	3409.	2231.
64	131.	WALTON	FL	2968.	2987.	0.	70.	230.
65	135.	DAWSON	GA	719.	639.	0	56.	72.
66	136.	FANNIN	GA	1862.	1672.	0	77.	316.
67	137.	GILMER	GA	1011.	1169.	0	88.	155.
68	139.	LUMPKIN	GA	1185.	770.	0.	133.	53.
69	141.	WHITE	GA	1182.	980.	0	216.	269.
70	143.	CLAYTON	GA	33839.	17564.	0.	1316.	520.
71	144.	COCH	GA	51077.	26408.	0.	1798.	837.
72	146.	DE KALB	GA	127776.	69238.	0.	875.	496.
73	149.	FULTON	GA	100445.	137635.	0.	2359.	1991.
74	150.	GINNETT	GA	19678.	7777.	0.	133.	74.
75	151.	HENRY	GA	4726.	3561.	0.	91.	121.
76	154.	SPALDIN	G	5434.	4706.	0.	83.	157.
77	155.	WALTON	GA	3388.	2885.	0	159.	417.
78	156.	Aiken	SC	15214.	11085.	0.	517.	747.
79	158.	COLUMBIA	GA	6137.	3340.	.	1325.	741.
80	165.	RICHMOND	GA	25327.	25197.	.	19432.	9267.
81	167.	WILKES	GA	1075.	1443.	0	95.	281.
82	183.	ROCKDALE	GA	5369.	2816.	0	358.	302.
83	184.	BRYAN	GA	1174.	1179.	0.	103.	146.
84	186.	CHATHAM	GA	25137.	24637.	0.	5949.	4892.
85	189.	LIBERTY	GA	3488.	3042.	.	3430.	956.
86	190.	LONG	GA	642.	510.	0.	63.	56.
87	192.	TATTNALL	GA	2344.	2042.	0.	166.	148.
88	195.	DU PAGE	IL	131021.	90102.	0.	353.	328.
89	197.	KANE	IL	44480.	34467.	0.	145.	152.
90	200.	WILL	IL	43735.	33154.	0.	235.	258.
91	206.	ROCK ISL	AND	20727.	21133.	0.	132.	158.
92	207.	SCOTT	IA	23521.	18528.	0.	3483.	3578.
93	209.	CARROLL	IL	2280.	3616.	0.	194.	305.
94	211.	DUNQUE	IA	7612.	8484.	0.	71.	91.
95	214.	JONES	IA	3196.	3012.	0	447.	721.
96	215.	LAFAYETT	E	2016.	2367.	0	197.	639.
97	221.	KENOSHA	WI	15468.	15503.	0.	208.	217.
98	222.	LAKE	IL	77728.	64781.	.	29816.	16207.
99	224.	RACINE	WI	21808.	19159.	0.	79.	109.
100	226.	BOONE	IN	5491.	5291.	0	628.	1082.
101	228.	HAMILTON	IN	13065.	8359.	0.	116.	174.
102	231.	JOHNSON	IN	14513.	9460.	0.	71.	66.

CASE-NO	IOI	COUNTY NAME	STATE	CIVILIAN IN	MIGRANTS OUT	PERCENT OF LABOR FORCE MILITARY	MILITARY IN	MIGRANTS OUT
103	232.	MADISON	IN	14807.	15746.	0.	125.	126.
104	233.	MARION	IN	101597.	107873.	0.	4306.	4161.
105	236.	SHELBY	IN	5104.	5554.	0.	51.	95.
106	239.	DALLAS	IA	4824.	4405.	0	432.	1199.
107	241.	MADISON	IA	1997.	1863.	0	159.	446.
108	244.	POLK	IA	40666.	40555.	0.	258.	272.
109	249.	CLAY	MO	28702.	27854.	0.	119.	115.
110	250.	CLINTON	MO	2800.	2549.	0	175.	486.
111	251.	DONIPHAN	KS	1700.	1607.	0	315.	375.
112	253.	LEAVENWORTH	KS	14721.	10196.	.	4568.	3046.
113	254.	PLATTE	MO	9494.	10298.	0.	217.	226.
114	255.	WYANDOTT	E KS	22811.	35249.	0.	363.	492.
115	256.	DOUGLAS	KS	4104.	9483.	0.	139.	75.
116	257.	JOHNSON	KS	59122.	38652.	0.	1162.	1055.
117	258.	JACKSON	MO	86876.	96567.	0.	1805.	1566.
118	259.	CLAY	KS	1128.	1930.	0.	126.	256.
119	260.	DICKINSON	N KS	3028.	3158.	0.	274.	457.
120	261.	GEARY	KS	7001.	8433.	1.	6463.	3276.
121	264.	RILEY	KS	11810.	11259.	.	11999.	6027.
122	265.	WAHAUNSE	E KS	1200.	1274.	0	68.	196.
123	270.	FAYETTE	KY	24224.	27923.	0.	256.	152.
124	271.	GARRARD	KY	1401.	1639.	0	76.	205.
125	273.	JESSAMIN	E KY	3566.	2719.	0	1528.	898.
126	274.	LINCOLN	KY	2139.	2634.	0	84.	316.
127	276.	MERCER	KY	2505.	1736.	0	234.	386.
128	279.	ROCKCAST	LE KY	1430.	1515.	0	80.	229.
129	282.	CHRISTIAN	N KY	6291.	12723.	.	8792.	7656.
130	285.	HUMPHREY	S TN	2445.	2223.	0	159.	281.
131	286.	LOGAN	KY	1726.	2595.	0	169.	492.
132	287.	MONTGOMERY	RY TN	10788.	9332.	.	9639.	2466.
133	292.	BRECKINRIDGE	KY	1432.	2493.	0	79.	346.
134	293.	BULLITT	KY	6404.	3664.	0.	78.	132.
135	294.	FLOYD	IN	7037.	8082.	0	850.	1425.
136	295.	GRAYSON	KY	1540.	2305.	0	138.	391.
137	296.	HARDIN	KY	14333.	17818.	.	23302.	11952.
138	298.	JEFFERSON	N KY	75740.	66457.	0.	1378.	1458.
139	300.	MEADE	KY	4936.	2799.	.	2325.	638.
140	302.	OLDHAM	KY	4008.	2525.	0	313.	332.
141	321.	ANDERSON	KY	1359.	1217.	0	63.	310.
142	328.	HARRISON	KY	1647.	1629.	0	140.	378.
143	335.	SCOTT	KY	2875.	2426.	0	1206.	738.
144	338.	JEFFERSON	N LA	76633.	39175.	0.	1078.	578.
145	339.	ORLEANS	LA	60200.	119578.	0.	1178.	1463.
146	340.	PLAQUEMINE	NES LA	5076.	6943.	0.	315.	506.
147	341.	ST. BERNARD	ND LA	10847.	5524.	0.	71.	60.
148	343.	ST. TAMM	NY LA	16300.	10887.	0.	90.	105.
149	344.	ALLEN	LA	2031.	2931.	0.	63.	153.
150	345.	BEAUREGAR	D LA	4590.	3924.	0.	498.	600.
151	348.	RAPIDES	LA	17426.	18080.	0.	2909.	3546.
152	351.	VERNON	LA	8577.	7170.	1.	24934.	6601.
153	352.	BALTIMORE	E MD	116363.	98487.	0.	1657.	1558.

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154	353.	BALTIMOR E CITY	MD	81746.	142363.	0.	2604.	3061.
155	355.	CECIL	MD	8428.	8940.	.	3916.	3108.
156	356.	CHESTER	PA	50134.	30544.	0.	2069.	1514.
157	357.	LANCASTER R	PA	28443.	23217.	0.	171.	180.
158	358.	YORK	PA	26330.	20834.	0.	582.	727.
159	361.	BERKELEY	WV	4141.	4123.	0.	95.	150.
160	362.	CLARK	VA	1258.	1242.	0	131.	289.
161	364.	FREDERIC K	MD	11041.	8747.	0.	755.	640.
162	369.	WASHINGTON	MD	12382.	9490.	0.	1044.	1353.
163	371.	FRANKLIN	PA	11250.	8151.	0.	281.	368.
164	373.	HARFORD	MD	25851.	15766.	.	8084.	4081.
165	399.	CUMBERLAND ND	PA	27336.	19223.	0.	1013.	815.
166	404.	ESSEX	MA	62724.	54409.	0.	821.	991.
167	405.	HILLSBOROUGH	NH	33733.	20815.	0.	263.	220.
168	406.	MIDDLESEX X	MA	158426.	144101.	0.	4893.	3899.
169	407.	NORFOLK	MA	95663.	80483.	0.	911.	928.
170	408.	ROCKINGHAM AM	NH	31928.	22884.	0.	4481.	4849.
171	409.	SUFFOLK	MA	78903.	138986.	0.	2014.	1524.
172	410.	WORCHESTER EH	MA	56287.	45604.	0.	5326.	4866.
173	411.	BANSTABLE E	MA	24036.	13444.	0.	3629.	4112.
174	412.	BRISTOL	MA	46311.	31679.	0.	794.	1072.
175	413.	PLYMOUTH	MA	59210.	36510.	0.	665.	713.
176	417.	CALHOUN	MI	17606.	20961.	0.	190.	248.
177	418.	EATON	MI	17109.	9999.	0.	50.	52.
178	423.	MACOMB	MI	120425.	72112.	0.	2418.	1906.
179	424.	OAKLAND	MI	178247.	111347.	0.	434.	395.
180	425.	ST. CLAIR R	MI	16927.	12527.	0.	153.	248.
181	432.	CASS	MO	11687.	8405.	0.	1825.	1495.
182	436.	JOHNSON	MO	7862.	10328.	.	2452.	1531.
183	437.	LAFAYETTE E	MO	4532.	3604.	0.	145.	312.
184	442.	MADISON	IL	29972.	26769.	0.	548.	548.
185	445.	ST. CHARLES	MO	23610.	12457.	0.	160.	123.
186	446.	ST. LOUIS	MO	184538.	115970.	0.	1326.	1020.
187	447.	ST. LOUIS CITY	MO	63128.	154574.	0.	463.	844.
188	449.	LACLEDE	MO	3474.	2664.	0.	94.	183.
189	452.	PHELPS	MO	5309.	4044.	0.	172.	173.
190	453.	PULASKI	MO	10793.	8695.	1.	26304.	6168.
191	456.	MINERAL	MT	782.	1007.	0	77.	157.
192	458.	CASS	NE	3547.	3357.	0.	599.	736.
193	459.	DOUGLAS	NE	53802.	61234.	0.	2219.	2223.
194	460.	HARRISON	IA	1883.	2181.	0	176.	676.
195	462.	POTTAWATAMIE	IA	11817.	12765.	0.	243.	415.
196	463.	SARPY	NE	23478.	15390.	.	8304.	4813.
197	465.	CLARK	NV	73154.	50276.	0.	9143.	5280.
198	466.	NYE	NV	2421.	2520.	0.	313.	202.
199	467.	ATLANTIC	NJ	22894.	16685.	0.	339.	463.
200	468.	BUCKS	PA	76415.	47323.	0.	1288.	1099.
201	469.	HURLINGTOWN	NJ	74630.	42928.	.	31724.	16579.
202	470.	CAMDEN	NJ	63547.	51480.	0.	1184.	1353.
203	471.	MERCER	NJ	35435.	32520.	0.	282.	277.
204	472.	MIDDLESEX X	NJ	100069.	70339.	0.	412.	304.

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205	473.	MONMOUTH		NJ	91733.	52830.	0.	9603.	7221.
206	474.	PHILADEL	PHIA	PA	125463.	216582.	0.	4348.	4247.
207	475.	OCEAN		NJ	60250.	23362.	0.	2233.	2076.
208	480.	RICHMOND		NY	52783.	25238.	0.	612.	474.
209	488.	SOMERSET		NJ	43807.	29887.	0.	149.	150.
210	489.	BERGEN		NJ	137740.	124020.	0.	292.	463.
211	490.	HUDSON		NJ	76972.	80336.	0.	467.	647.
212	491.	HUNTERDO	N	NJ	15022.	9012.	0.	68.	72.
213	493.	MORRIS		NJ	88563.	49175.	0.	606.	474.
214	494.	PASSAIC		NJ	54730.	58810.	0.	214.	329.
215	497.	SUSSEX		NJ	18490.	4054.	0.	54.	54.
216	500.	DONA ANA		NM	12600.	13823.	0.	1477.	1014.
217	501.	EL PASO		TX	60741.	59439.	.	15343.	12979.
218	503.	OTERO		NM	12100.	12374.	.	4482.	3132.
219	506.	MCKINLEY		NM	5555.	6241.	0.	81.	104.
220	514.	SUFFOLK		NY	224829.	90854.	0.	923.	843.
221	517.	SENECA		NY	4468.	4746.	0.	400.	344.
222	518.	SCHUYLER		NY	2600.	2547.	0.	297.	607.
223	519.	WAYNE		NY	11682.	8924.	0.	72.	127.
224	522.	ALBANY		NY	32812.	38528.	0.	189.	166.
225	526.	KENNELA	ER	NY	16262.	16755.	0.	147.	134.
226	527.	SAHATUGA		NY	25540.	12648.	0.	721.	571.
227	528.	SCHENECT	ADY	NY	20328.	22703.	0.	158.	162.
228	531.	DUTCHESS		NY	33421.	26602.	0.	91.	75.
229	532.	FAIRFIELD	D	CT	115211.	80546.	0.	334.	418.
230	533.	ORANGE		NY	34532.	24853.	0.	4571.	4155.
231	535.	PUTNAM		NY	16361.	6828.	0.	1425.	1513.
232	536.	ROCKLAND		NY	56479.	24544.	0.	147.	143.
233	539.	WESTCHES	TER	NY	126819.	112163.	0.	466.	671.
234	541.	ERIE		OH	10831.	9411.	0.	75.	135.
235	543.	LUCAS		OH	45903.	44674.	0.	234.	251.
236	545.	SANDUSKY		OH	7804.	7660.	0.	789.	1795.
237	570.	HASKELL		OK	1724.	1835.	0.	68.	278.
238	575.	WAGONER		OK	7027.	3420.	0.	352.	461.
239	578.	COMANCHE		OK	25439.	24805.	.	23611.	11674.
240	581.	STEPHENS		OK	6540.	6232.	0.	84.	189.
241	582.	TILLMAN		OK	1846.	2264.	0.	78.	202.
242	584.	FRANKLIN		WA	7071.	6988.	0.	184.	245.
243	587.	WALLA WA	LLA	WA	6836.	8158.	0.	170.	163.
244	589.	DAUPHIN		PA	28185.	31654.	0.	176.	517.
245	593.	MIFFLIN		PA	3713.	4133.	0.	473.	1161.
246	594.	PEPPY		PA	2766.	3016.	0.	70.	120.
247	599.	DELEWARE		PA	64328.	72741.	0.	431.	469.
248	600.	GLOUCESTER	ER	NJ	28240.	14441.	0.	506.	521.
249	602.	MONTGOME	RY	PA	102546.	73501.	0.	126.	1065.
250	603.	NEW CAST	LE	DE	51783.	33843.	0.	403.	278.
251	605.	SALEM		NJ	6046.	6167.	0.	212.	366.
252	618.	LACKAWAN	NA	PA	14976.	14614.	0.	103.	162.
253	619.	LUZERNE		PA	22169.	21905.	0.	338.	640.
254	620.	MONROE		PA	5748.	3988.	0.	99.	72.
255	621.	NORTHAMP	TON	PA	22306.	18537.	0.	657.	83.

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256	627.	BERKELEY	SC	14792.	6979.	.	2343.	1467.
257	628.	CHARLEST	ON	37742.	47478.	.	20713.	15620.
258	630.	DORCHEST	ER	7336.	4857.	0.	947.	869.
259	631.	GEORGETO	WN	2497.	3991.	0.	57.	134.
260	632.	CALHOUN	SC	861.	1473.	0	70.	218.
261	634.	FAIRFIEL	D	1267.	1673.	0.	63.	228.
262	635.	KERSHAW	SC	4492.	4114.	0.	91.	155.
263	637.	LEXINGTO	N	20470.	8114.	0.	406.	190.
264	640.	RICHLAND	SC	35114.	32302.	.	19934.	8501.
265	641.	SUMTER	SC	14703.	13146.	.	6124.	4996.
266	642.	CRITTEND	EN	6114.	9489.	0.	57.	72.
267	644.	FAYETTE	TN	2370.	4417.	0	135.	477.
268	645.	MARSHALL	MS	2894.	3374.	0	331.	815.
269	646.	SHELBY	TN	91585.	85139.	0.	12558.	9603.
270	649.	TIPTON	TN	3454.	5005.	0.	616.	594.
271	650.	TUNICA	MS	964.	3189.	0	119.	284.
272	651.	RENTON	TN	2004.	1689.	0	84.	267.
273	655.	DECATUR	TN	1047.	844.	0	119.	228.
274	658.	HENRY	TN	3767.	2849.	0.	51.	150.
275	666.	BELL	TX	28227.	29047.	.	25061.	15662.
276	668.	CORYELL	TX	9385.	4519.	1.	11296.	1405.
277	669.	LAMPASAS	TX	1956.	1996.	0.	311.	278.
278	670.	MCCLENNAN	TX	20433.	26861.	0.	148.	199.
279	673.	BOWIE	TX	12455.	9290.	0.	149.	226.
280	675.	HEMPSTEAD	D	3037.	2552.	0	211.	625.
281	676.	HOWARD	AR	1400.	1878.	0	76.	416.
282	677.	LAFAYETT	E	1357.	1301.	0	96.	318.
283	683.	HOOD	TX	1567.	848.	0	77.	174.
284	685.	PARKER	TX	9268.	4387.	.	2877.	919.
285	686.	PALO PIN	TO	6625.	4646.	.	2640.	1086.
286	689.	DAVIS	UT	24908.	15641.	0.	1903.	1642.
287	690.	MORGAN	UT	987.	605.	0	173.	111.
288	692.	SALT LAKE	E	56182.	61080.	0.	558.	503.
289	693.	WEBER	UT	17902.	20213.	0.	484.	516.
290	697.	TOOELE	UT	3250.	4102.	0.	558.	736.
291	698.	UTAH	UT	17211.	17660.	0.	80.	51.
292	704.	FAUQUIER	VA	4830.	4419.	0.	846.	882.
293	705.	STAFFORD	VA	4811.	3295.	.	2101.	692.
294	710.	CHESTERF	IELD	21132.	19410.	0.	407.	276.
295	711.	DINWIDDIE	E	5653.	2364.	0.	511.	294.
296	714.	HENRICO	VA	38027.	24024.	0.	284.	184.
297	715.	JAMES CI	TY	5664.	2177.	0.	708.	470.
298	716.	NEW KENT	VA	823.	572.	0	53.	119.
299	718.	PRINCE G	LONGE	6303.	7347.	1.	9884.	3196.
300	721.	SUSSEX	VA	873.	1747.	0	107.	378.
301	733.	CURRITUC	K	1149.	934.	0.	130.	226.
302	748.	CLARKE	VA	1258.	1242.	0	131.	289.
303	754.	CLACKAMA	S	46303.	24566.	0.	141.	141.
304	755.	CLARK	WA	26326.	13521.	0.	227.	250.
305	757.	COWLITZ	WA	12462.	10094.	0.	161.	212.
306	758.	MULTNOMA	H	92325.	96347.	0.	549.	505.

CASE-NO	ID1	COUNTY NAME	STATE	CIVILIAN IN	MIGRANTS OUT	PERCENT OF LABOR FORCE MILITARY	MILITARY IN	MIGRANTS OUT	
307	760.	WASHINGT	ON	OR	48337.	20412.	0.	224.	137.
308	761.	KING		WA	216946.	144208.	0.	3860.	2395.
309	763.	PIERCE		WA	84600.	53559.	.	39771.	18794.
310	764.	THURSTON		WA	20160.	10036.	0.	755.	662.
311	765.	DIST O C	OLUMBIA	DC	80785.	148926.	0.	7892.	6438.
312	766.	MONTGOME	RY	MD	133174.	71381.	0.	6611.	5381.
313	767.	HOWARD		MD	19351.	9808.	0.	385.	236.
314	768.	ANNE ARU	NDEL	MD	67474.	39104.	.	14549.	9169.
315	769.	CALVERT		MD	2992.	2244.	0.	79.	194.
316	770.	PRINCE G	EONGES	MD	169016.	103833.	0.	20253.	8721.
317	771.	CHARLES		MD	11020.	5896.	0.	1106.	822.
318	772.	PRINCE W	ILLIAM	VA	39583.	22161.	.	10454.	5445.
319	773.	LOUDOUN		VA	10192.	6728.	0.	379.	359.
320	774.	ARLINGTO	N	VA	46560.	55309.	.	14506.	10028.
321	775.	FAIRFAX		VA	158930.	67921.	.	28645.	14780.
322	777.	RANDERA		TX	1463.	902.	0	14457.	102.
323	776.	BEXAR		TX	119228.	98875.	.	41933.	28411.
324	779.	COMAL		TX	4650.	2930.	0.	148.	148.
325	780.	GUADALUP	E	TX	6988.	4712.	0.	850.	519.
326	781.	KENDALL		TX	1533.	1223.	0.	54.	106.
327	782.	MEDINA		TX	3053.	3210.	0.	52.	197.
328	785.	NASSEAU		NY	199002.	190123.	0.	1064.	2564.
329	789.	ESSEX		NJ	101055.	139243.	0.	337.	504.
330	796.	UNION		NJ	85853.	89559.	0.	209.	365.
331	801.	CHESAPEA	KE	VA	21024.	14020.	0.	1828.	1810.
332	802.	HAMPTON		VA	31007.	26563.	.	8388.	5702.
333	803.	JAMES CI	TY	VA	5664.	2177.	0.	708.	470.
334	805.	NEWPORT	NEWS	VA	27538.	28436.	.	14796.	6798.
335	806.	NORFOLK		VA	48342.	78235.	.	49571.	34621.
336	807.	PORTSMOU	TH	VA	15344.	18923.	0.	2929.	3152.
337	808.	VIRGINIA	BEACH	VA	51450.	34429.	.	23403.	10657.
338	809.	YORK		VA	9740.	7169.	.	3106.	1872.

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1. Migration , internal. 2. Military bases -- social aspects. I. Webster,  
Ronald Dwight. II. Title. III. Series: U.S. Army Construction Engineering  
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